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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,641	08/26/2003	Nikki Casstevens	PGI6044P0991US	3897

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EXAMINER	
MATZEK, MATTHEW D	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,641	CASSTEVENS ET AL.	
	Examiner	Art Unit	
	Matthew D. Matzek	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/30/04, 4/2/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 16 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims are claiming an imaged nonwoven fabric with a three-dimensional image device selected from the "nub" or "geodesic" types. It is first noted that the claimed "three-dimensional image transfer device" does not form part of the final product (ie. the nonwoven fabric), but it relates to a device used in the production of the fabric. Therefore, no patentable weight is give to such a limitation. Second, the terms "nub" type or "geodesic" type are not described/defined in the specification as to enable one of ordinary skill in the art to use said "type" of device.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Independent claim 1, claims a "three dimensional image transfer device" but a "three-dimensional image transfer device" does not form part of the final product (ie. the nonwoven fabric), but it relates to a device used in the

production of the fabric. Therefore, no patentable weight is give to such a limitation. If Applicants are trying to claim a product by process, it is advised herein to amend the claims accordingly, but it is further noted that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

4. Claims 16 and 17 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "nub" and "geodesic" image transfer devices renders the instant claims indefinite as it is unclear to Examiner what type of image is transferred to the nonwoven fabric and is not directed to the claimed article of a nonwoven web. The aforementioned claims have been interpreted to include elevated, dome-like protrusions. Appropriate amendment is necessary.

5. Regarding claim 20, the word "means" is preceded by the word(s) "air passageways provide" in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Double Patenting

6. Claims 1-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-20 of U.S. Patent No. 6,675,429. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instantly claimed and patented articles are directed to hydroentangled, nonwoven webs comprising thermoplastic staple fibers of common denier and length, common surfactants, and melt additives. The nonwoven webs share common basis weights and have been imparted with three-dimensional images via common image "types".

7. Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/206,271 ('271) in view of Fereshtehkhou et al. (US PG Pub. 2001/0055926). Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instantly claimed and that of the copending application '271 are directed to hydroentangled, nonwoven webs comprising polyester staple fibers imparted with a three-dimensional pattern.

8. Fereshtehkhou et al. disclose hydroentangled, macroscopically three-dimensional cleaning sheets (Abstract and [0065]). A preferred cleaning sheet comprises an essentially continuous region of higher basis weight and a plurality of discontinuous regions circumscribed by the high basis weight region [0008]. The fibers of the cleaning sheet may be made of natural cellulosics, polyolefins, polyesters, and polyamides [0064]. With regards to caliper differences it is preferred that the caliper difference between the discontinuous regions and the continuous region is at least 25% [0060].

9. Since '271 and Fereshtehkhou et al. are from the same field of hydroentangled cleaning sheets, the purpose disclosed by Fereshtehkhou et al. would have been recognized in the pertinent art of '271.

10. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the hydroentangled, nonwoven fabric of '271 with a caliper difference between the crests and unelevated valleys of at least 25% motivated by the desire to provide the article with improved soil removal as disclosed by Fereshtehkhou et al. [0005].

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

11. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Carter et al. (US 6,675,429).

12. Carter et al. disclose a hydroentangled, nonwoven article that has been imparted with a three-dimensional image for use in cleaning applications (Abstract). Figures 2-7 and 9-12 illustrate nonwoven articles of the invention that possess fibrous surface projections extending from a fibrous support plane and comprising at least 25% of the thickness of the overall support plane. Figure 8 illustrates an image transfer device used to impart a "wave" structure to the applied invention. The Examiner takes the position that all of the illustrated nonwoven articles of this applied invention provide the "wave-like" surface projections claimed herein, and form air passageways parallel to the fibrous support plane. This position is supported by the fact that topography of the illustrated articles necessarily forms "waves" as the protrusions form crests in the sheets and the apertures and unelevated plane form valleys.

13. The imaged nonwoven web may be made of staple fibers of lengths of 1 to 2 inches, denier within a range of 1 to 6 denier and hydrophobic or hydrophilic surface modifiers (claims 2-4, 6, 11 and 14). The nonwoven web may further comprise melt additives, the instantly claimed types of staple fibers and possesses the instantly claimed basis weights (claims 5, 7-10 and 19-20). In the preferred form, the precursor web is hydroentangled on a foraminous surface prior to hydroentangling on the image transfer device (col. 3, lines 31-37). Claims 16 and 17 of the applied patent teach the use of instantly claimed image transfer devices.

14. Claims 20 and 21 are rejected as the article of the prior art meet the structural and compositional limitations set forth in independent claim 1. As such said article is capable of forming a lather and serve as a facial cleaning product.

15. Claims 1-12 and 15-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Fereshtehkhou et al. (US PG Pub 2001/0055926) published on 12/27/2001 and on file as of 4/12/2001.

16. Fereshtehkhou et al. disclose hydroentangled, macroscopically three-dimensional cleaning sheets (Abstract and [0065]). A preferred cleaning sheet comprises an essentially continuous region of higher basis weight and a plurality of discontinuous regions circumscribed by the high basis weight region [0008]. With regards to caliper differences it is preferred that the caliper difference between the discontinuous regions and the continuous region is at least 25% [0060]. Figure 4 illustrates the wave-like form of the sheet allowing air passageways parallel to the fibrous support plane. The use of staple fibers for reinforcement means of a cleaning sheet is taught [0003]. Hydrophobic surfactants such as paraffin are available for the surface modification of the cleaning sheet [0109]. Claims 5 and 6 are rejected as the nonwoven fabric of the applied invention may comprise either hydrophobic or hydrophilic meltblown fibers [0064]. With regards to claim 4 it is noted that the Fereshtehkhou et al. reference further teaches the use of additives in the fibers that read on the presently claimed additives [0109]. The fibers of the cleaning sheet may be made of natural cellulosics, polyolefins, polyesters, and polyamides [0064].

17. The fibers of the hydroentangled web comprise fibers of less than 4.0 denier [0074]. Claims 15-17 are rejected as the presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656. The instantly claimed article and that of prior art are

hydroentangled webs comprising common staple fibers, denier, additives and are imparted with three-dimensionality, therefore both articles are the same or similar.

18. Claims 18 and 19 are rejected as the basis weight of the nonwoven fabrics of Table 1 range from 1.85-4.80 ounces per square yard (calculation done by Examiner).

19. Claims 20 and 21 are rejected as the article of the prior art meet the structural and compositional limitations set forth in independent claim 1. As such said article is capable of forming a lather and serve as a facial cleaning product.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claims 1-21 are rejected under 35 U.S.C. 103(a) as unpatentable over Gilmore et al. (US 5,369,858) in view of Fereshtehkhou et al. (PG Pub 2001/0055926).

21. Gilmore et al. disclose a hydroentangled, nonwoven fabric comprising areas of higher density and areas of lower density (Abstract). The fabric may be imparted with three-dimensionality by contacting a cylindrical drum that has repeating pattern of projections arranged on a smooth surface (image transfer device). The drum will also possess smooth or flat areas that will not impart the fabric with three-dimensionality (col. 7, line 60 – col. 8, line 10).

22. The Examiner takes the position that all of the illustrated nonwoven articles of this applied invention and this image transfer device may impart "wave-like" surface projections and form air passageways parallel to the fibrous support plane. This position is supported by the fact

that topography of the illustrated articles necessarily forms "waves" as the protrusions form crests in the sheets and the apertures and unelevated plane form valleys.

23. Gilmore et al. teach the use of staple fibers in the nonwoven web, along with hydrophilic surface modification agents (col. 6, lines 4-5 and col. 14, lines 53-58). Claims 5 and 6 are rejected as the nonwoven fabric of the applied invention comprises meltblown fibers such as those of hydrophobic polypropylene (Example 1). The Examiner equates the polypropylene meltblown fibers of Example 1 to Applicant's hydrophobic melt additive as said fibers are hydrophobic and meltblown.

24. The staple fibers of the applied invention may be polyester (thermoplastic and polyolefin), cotton (natural), or nylon (polyamide) (col. 6, line 4-24). The staple fibers may have a denier of 1.5 denier and be of 1.5 inches in length (Example 7).

25. Claims 15-17 are rejected as the presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656. The instantly claimed article and that of prior art are hydroentangled webs comprising common staple fibers, denier, additives and are imparted with three-dimensionality, therefore both articles are the same or similar.

26. The imaged nonwoven fabric of the applied invention has a basis weight of between 0.71 and 3.17 ounces per square yard (Table 2, conversions done by Examiner).

27. Claims 20 and 21 are rejected as the article of the prior art meet the structural and compositional limitations set forth in independent claim 1. As such said article is capable of forming a lather and serve as a facial cleaning product.

28. However, Gilmore et al. does not specifically teach that the fibrous surface projections of the imaged nonwoven fabric comprise at least 25% of the thickness of the overall support plane.

29. Fereshtehkhou et al. disclose hydroentangled, macroscopically three-dimensional cleaning sheets (Abstract and [0065]). A preferred cleaning sheet comprises an essentially continuous region of higher basis weight and a plurality of discontinuous regions circumscribed by the high basis weight region [0008]. The fibers of the cleaning sheet may be made of natural cellulosics, polyolefins, polyesters, and polyamides [0064]. With regards to caliper differences it is preferred that the caliper difference between the discontinuous regions and the continuous region is at least 25% [0060].

30. Since Gilmore et al. and Fereshtehkhou et al. are from the same field of hydroentangled cleaning sheets, the purpose disclosed by Fereshtehkhou et al. would have been recognized in the pertinent art of Gilmore et al.

31. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the hydroentangled, nonwoven fabric of Gilmore et al. with a caliper difference between the crests and unelevated valleys of at least 25% motivated by the desire to provide the article with improved soil removal as disclosed by Fereshtehkhou et al. [0005].

32. Claims 1-2, 7-9, 11-12, 15-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being obvious over Curtis (US PG Pub 2003/0104745) in view of Fereshtehkhou et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

33. Curtis claims a hydroentangled nonwoven fabric imparted with a three-dimensional image for use as a cleaning article (Abstract). The fabric comprises polyester staple fibers of 1.5 denier and may have a basis weight of 2.6 ounces per square yard (claims 1 and 4 and [0020, 0021]). In a preferred form, the precursor web is hydroentangled on a foraminous surface prior to hydroentangling on the image transfer surface [0007].

34. However, the Curtis reference does not disclose having surface projections extending from a fibrous support plane comprising at least 25% of the thickness of the overall support plane.

35. Claims 15-17 are rejected as the presence of process limitations on product claims, in which the product does not otherwise patentably distinguish over prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656. The instantly claimed article and that of prior art are hydroentangled webs comprising common staple fibers, denier, and are imparted with three-dimensionality, therefore both articles are the same or similar.

36. Claims 20 and 21 are rejected as the article of the prior art meet the structural and compositional limitations set forth in independent claim 1. As such said article is capable of forming a lather and serve as a facial cleaning product.

37. Fereshtehkhou et al. disclose hydroentangled, macroscopically three-dimensional cleaning sheets (Abstract and [0065]). A preferred cleaning sheet comprises an essentially continuous region of higher basis weight and a plurality of discontinuous regions circumscribed by the high basis weight region [0008]. The fibers of the cleaning sheet may be made of natural cellulosics, polyolefins, polyesters, and polyamides [0064]. With regards to caliper differences it is preferred that the caliper difference between the discontinuous regions and the continuous region is at least 25% [0060].

38. Since Curtis and Fereshtehkhou et al. are from the same field of hydroentangled cleaning sheets, the purpose disclosed by Fereshtehkhou et al. would have been recognized in the pertinent art of Curtis.

39. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the hydroentangled, nonwoven fabric of Curtis with a caliper difference between the crests and unelevated valleys of at least 25% motivated by the desire to provide the article with improved soil removal as disclosed by Fereshtehkhou et al. [0005].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER